

REMARKS

Claims 1-24 are pending. Claim 1 is amended. No new matter is submitted.

Accordingly entry of the Amendment is respectfully requested.

The attached Appendix includes a marked-up copy of the rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

In the Office Action claims 1-24 are rejected under 35 U.S.C. §103(a) as unpatentable over Nakamura (U.S. Patent No. 6,210,794 B1) in view of Coleman (U.S. Patent No. 5,741,387). The rejection is respectfully traversed.

Applicants' invention comprises at least a thermal transfer recording medium comprising a base material in the form of a thin film, a peel layer laminated on the base material and including a wax (A), and an ink layer laminated on the peel layer and including a styrene resin (B), a binder component (C) and a coloring component (D), wherein the wax (A) is compatible with the styrene resin (B) when within a weight ratio range of 10:90 to 90:10 of the wax and the styrene resin, respectively, and at a temperature at least 30°C more than the melting points of the wax (A) and styrene resin(B). By using the peel layer including the wax (A) and the ink layer including the styrene resin (B) that is compatible with the wax (A), i.e., does not separate from the wax (A) under specified wax-to-resin weight ratios and temperature conditions (specification at page 6, lines 17-21), the invention provides for a smooth transference of ink even at high speed printing. The art applied fails to teach the combination of features and advantages of the claimed invention.

Nakamura discloses a thermal transfer sheet A1 comprised of a substrate sheet 1, a release layer 3, coloring layer 2, and adhesive layer 4. Nakamura however does not require wax to be compatible with the resin according to specified wax-to-resin weight ratios and thermal conditions as in the claimed invention. Further, Nakamura permits, but does not require, the addition of wax into the resin of the ink layer directly rather than adding wax into

the peel layer as in the claimed invention (col. 4, lines 42-55 according to specified conditions such that the wax of the peel layer and the resin of the ink layer are compatible). Further, even where Nakamura refers to a wax in the release layer 3, as at col. 5, lines 19-24, Nakamura only generally suggests that the release layer is comprised "mainly" of a wax. Thus Nakamura nowhere specifies or suggests that the weight ratio of the wax of the release layer 3 relative to the resin of the ink layer 2 and a specifically associated thermal condition exists to provide the ink transference advantages of the claimed invention. For the foregoing reasons, Nakamura cannot be reasonably construed as teaching, disclosing or even suggesting the thermal transfer recording medium with specified wax-to-resin weight ratios and thermal conditions as in the claimed invention.

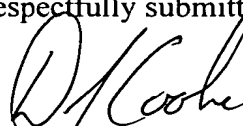
Coleman discloses a lithographic printing process and transfer sheet 6 that fails to overcome the deficiencies of Nakamura with respect to claim 1 as discussed above.

As neither Nakamura nor Coleman singly, nor Nakamura in combination with Coleman teach, disclose or suggest the combination of features claimed, withdrawal of the 35 U.S.C. §103(a) rejection of claims 1-24 is respectfully requested.

Applicants submit that the claims presented in view of the remarks made herein patentably distinguish over the art applied, and pose no 35 U.S.C. §112 issues. Accordingly allowance of claims 1-24 is respectfully requested.

Should the Examiner determine that anything further is desirable to place the application in even better form for allowance, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Dermott J. Cooke
Registration No. 41,685

JAO:DJC/ccs

Attachment:
Appendix

Date: March 15, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--

APPENDIX

Changes to Claims:

The following is a marked-up version of the amended claim:

1. (Amended) A thermal transfer recording medium, comprising of:
a base material in the form of a thin film;
a peel layer laminated on said base material and including a wax (A); and
an ink layer laminated on said peel layer and including a styrene resin (B), a binder component (C) and a coloring component (D); wherein said wax (A) is compatible with said styrene resin (B) when within a weight ratio range of 10:90 to 90:10 of the wax and the styrene resin, respectively, and at a temperature at least 30°C more than the melting points of the wax (A) and the styrene resin(B).